

WHAT IS CLAIMED IS:

1. A peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid, a staying time, the number of cycles, a total dialysis time, and a total amount of infusion fluid, and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

either a first therapy mode or a second therapy mode is selectable, and said first therapy mode is adapted to calculate the total amount of dialysis fluid on the basis of the amount of infusion fluid, the staying time, and the number of cycles, which are set-up and inputted in said input means , and said second therapy mode is adapted to calculate the total amount of dialysis fluid and the staying time on the basis of the dialysis time,

the amount of infusion fluid, and the number of cycles, which are set-up and inputted in said input means; and

a therapy start time is settable in both said first therapy mode and said second therapy mode.

2. A peritoneal dialysis apparatus (1) according to claim 1, further including means for automatically calculating after said second therapy mode is selected and set-up, the staying time and a dialysis end time per one cycle by setting up and inputting a desired dialysis time.

3. A peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid, a staying time, the number of cycles, a total dialysis time, and a total amount of infusion fluid, and also inputting a therapy start time, and a peritoneal dialysis function, and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis

fluid to a patient by said delivery means and recovering the drained fluid and;

said apparatus includes:

means for calculating a dialysis end time from a desired dialysis time while the inputted set-up therapy start time is taken as a preferential value.

4. A peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid (mL) and a fluid infusion rate (mL/min), and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said apparatus includes:

means for calculating a fluid infusion time (min) on the basis of the amount of infusion fluid (mL) and the fluid infusion rate (mL/min);

means for deciding whether or not fluid infusion is performed for a fluid infusion time (min) over a specific ratio of the calculated fluid infusion time (min); and

means for generating an alarm indicating defective fluid infusion if it is decided that fluid infusion is defective.

5. A peritoneal dialysis apparatus according to claim 4, wherein the fluid infusion time (min) is obtained by adding a preparation time until the start of fluid infusion to a value of the amount of infusion fluid (mL)/the fluid infusion rate (mL/min).

6. A peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid (mL) and a fluid drainage rate (mL/min), and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and

recovering the drained fluid and;

said apparatus includes:

means for calculating an amount of drainage fluid (mL) on the basis of the inputted dialysis conditions, and for calculating a fluid drainage time (min) on the basis of the calculated amount of drainage fluid (mL) and the fluid drainage rate (mL/min);

means for deciding whether or not fluid drainage is performed for a fluid drainage time (min) over a specific ratio of the calculated fluid drainage time (min); and

means for generating an alarm indicating defective fluid drainage if it is decided that fluid drainage is defective.

7. A peritoneal dialysis apparatus according to claim 6, wherein the fluid drainage time (min) is obtained by adding a preparation time until the start of fluid drainage to a value of the amount of drainage fluid (mL)/the fluid drainage rate (mL/min).

8. A method of controlling a peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid

container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid (mL) and a fluid infusion rate (mL/min), and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said method includes:

a step of calculating a fluid infusion time (min) on the basis of the amount of infusion fluid (mL) and the fluid infusion rate (mL/min);

a step of deciding whether or not fluid infusion is performed for a fluid infusion time (min) over a specific ratio of the calculated fluid infusion time (min); and

a step of generating an alarm indicating defective fluid infusion if it is decided that fluid infusion is defective.

9. A method of controlling a peritoneal dialysis apparatus according to claim 8, wherein the fluid infusion time (min) is obtained by adding a preparation time until the start of fluid infusion to a value of the amount of infusion fluid (mL)/the fluid infusion rate (mL/min).

10. A method of controlling a peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container or recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid (mL) and a fluid drainage rate (mL/min), and display means for displaying the inputted dialysis conditions, wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said method includes:

a step of calculating an amount of drainage fluid (mL) on the basis of the inputted dialysis conditions, and calculating a fluid drainage time (min) on the basis of the calculated amount of drainage fluid (mL) and the fluid drainage rate (mL/min);

a step of deciding whether or not fluid drainage is performed for a fluid drainage time (min) over a specific ratio of the calculated fluid drainage time (min); and

a step of generating an alarm indicating defective

fluid drainage if it is decided that fluid drainage is defective.

11. A method of controlling a peritoneal dialysis apparatus according to claim 10, wherein the fluid drainage time (min) is obtained by adding a preparation time until the start of fluid drainage to a value of the amount of drainage fluid (mL)/the fluid drainage rate (mL/min).

12. A storage medium for storing a program used for a method of controlling a peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid (mL) and a fluid infusion rate (mL), and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said program includes:



a program string for carrying out a step of calculating a fluid infusion time (min) on the basis of the amount of infusion fluid (mL) and the fluid infusion rate (mL/min);

a program string for carrying out a step of deciding whether or not fluid infusion is performed for a fluid infusion time (min) over a specific ratio of the calculated fluid infusion time (min); and

a program string for carrying out a step of generating an alarm indicating defective fluid infusion if it is decided that fluid infusion is defective.

13. A storage medium for storing a program used for a method of controlling a peritoneal dialysis apparatus according to claim 12, wherein the fluid infusion time (min) is obtained by adding a preparation time until the start of fluid infusion to a value of the amount of infusion fluid (mL)/the fluid infusion rate (mL/min).

14. A storage medium for storing a program used for a method of controlling a peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means

for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions including an amount of infusion fluid (mL) and a fluid drainage rate (mL/min), and display means for displaying the inputted dialysis conditions, wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and ;

said program includes:

a program string for carrying out a step of calculating an amount of drainage fluid (mL) on the basis of the inputted dialysis conditions, and calculating a fluid drainage time (min) on the basis of the calculated amount of drainage fluid (mL) and the fluid drainage rate (mL/min);

a program string for carrying out a step of deciding whether or not fluid drainage is performed for a fluid drainage time (min) over a specific ratio of the calculated fluid drainage time (min); and

a program string for carrying out a step of generating an alarm indicating defective fluid drainage if it is decided that fluid drainage is defective.

15. A storage medium for storing a program used

for a method of controlling a peritoneal dialysis apparatus according to claim 14, the fluid drainage time (min) is obtained by adding a preparation time until the start of fluid drainage to a value of the amount of drainage fluid (mL)/the fluid drainage rate (mL/min).

16. A peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions, and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said apparatus includes:

means for selecting a temporary separation mode is selected during therapy, and an inputting instruction for temporary stoppage of the therapy; and

means for displaying a residual staying time on the basis of the inputted instruction.

17. A peritoneal dialysis apparatus according to claim 16, wherein means for displaying the residual staying time is a portable terminal.

18. A method of controlling a peritoneal dialysis apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions, and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said method includes:

a step for selecting a temporary separation mode during therapy, and inputting an instruction for temporary stoppage of the therapy; and

a step for displaying a residual staying time on the basis of the inputted instruction.

19. A storage medium for storing a program used for a method of controlling a peritoneal dialysis

apparatus including at least one dialysis fluid container filled with a dialysis fluid, a dialysis fluid circuit containing at least one drained fluid container for recovering the dialysis fluid, fluid delivery means for delivering the dialysis fluid with said dialysis fluid container as a start point or said drained fluid container as an end point, input means for inputting dialysis conditions, and display means for displaying the inputted dialysis conditions,

wherein dialysis is performed by delivering the dialysis fluid to a patient by said delivery means and recovering the drained fluid and;

said program includes:

a program string for carrying out a step for selecting a temporary separation mode during therapy, and inputting an instruction for temporary stoppage of the therapy; and

a program string for carrying out a step for displaying a residual staying time on the basis of the inputted instruction.